

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 384 AND SECOND AVE. /WAYNE AVE. IN MONTGOMERY COUNTY. THE SIGNAL IMPROVEMENTS INCLUDES NEW MAST ARMS, SIGNAL HEADS, SIGNS, AUTO-SCOPE DETECTION,NEW CABINET/CONTROLLER AND NEW INTERCONNECT WILL BE PROVIDED FOR MD 384 AT SECOND AVE./WAYNE AVE.

MD 384 RUNS IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FIVE PHASE, FULL TRAFFIC ACTUATED MODE. THE MD 384 APPROACHES WILL OPERATE CONCURRENTLY AND THE SECOND AVE./ WAYNE AVE. WILL OPERATE IN A SPLIT PHASE OPERATION.

EXCLUSIVE/ PREMISSIVE LEFT TURN PHASE WILL BE PROVIDE FOR EASTBOUND MD 384.

THE SIDE STREET WILL HAVE SOUTH TO WEST RIGHT TURN OVERLAP ALONG MD ROUTE 384.

A CONNCURRENT PEDESTRIAN MOVEMENT WILL OPERATE ALONG THE EAST AND WEST LEGS OF THE INTERSECTION. AN ALTERNATE PEDSTRAIN MOVEMENT WILL OPERATE ALONG BOTH NORTH AND SOUTH LEGS OF THE INTERSECTION.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

CAT CODE	ITEM	QUANTITY	DESCRIPTION
222.1	SF	ALUMINUM SHEET SIGNS	
2	EA	R3-2 (NO LEFT TURN) (30"x30") GROUND MOUNTED	
4	EA	R10-11B (NO TURN ON RED) (24"x24") MAST ARM MOUNTED	
4	EA	R4-7 (KEEP RIGHT) (24"x30") GROUND MOUNTED	
1	EA	D-3(1) (← SECOND AVE) (VAR.X16") 1 EACH MAST ARM MOUNTED	
1	EA	D-3(1) (← WAYNE AVE) (VAR.X16") 1 EACH MAST ARM MOUNTED	
1	EA	D-3(1) (SECOND AVE→) (VAR.X16") 1 EACH MAST ARM MOUNTED	
1	EA	D-3(1) (WAYNE AVE →) (VAR.X16") 1 EACH MAST ARM MOUNTED	
2	EA	SHIELD ASSEMBLY (EAST, WEST MD 384, LEFT, RIGHT ARROWS) (30"x51") POLE MOUNTED	
2	EA	SHIELD ASSEMBLY (EAST, WEST MD 384, LEFT, RIGHT ARROWS) (48"x75") POLE MOUNTED	
2	EA	R10-4(1) (PED. SIGN) (9"x12") POLE MOUNTED	
5	EA	D1-1 (BIKE ROUTE TO MONT. HILLS) (24"x30") POLE MOUNTED	
1	EA	SHIELD ASSEMBLY (NORTH MD 97, LEFT ARROW) (30"x51") POLE MOUNTED	
1	EA	R10-12 (LEFT TURN YIELD ON GREEN) (36"x42") MAST ARM MOUNTED	
2	EA	D-3(1) (COLESVILLE RD) (VAR.X16") MAST ARM MOUNTED	
1	EA	CABINET W/ TELEMETRY MONT. CO. (SYSTEM CAB), SIZE 6	

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CAT CODE	ITEM	QUANTITY	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	4	CY	TEST PIT EXCAVATION
8059	6	CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8011	62	EA	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8003	5	EA	VIDEO CABLE TO CONTROLLER (500FT.)
8051	75	LF	FURNISH AND INSTALL 3 INCH SCH 80 RIGID PVC CONDUIT - TRENCHED
8052	45	LF	FURNISH AND INSTALL 4 INCH SCH 80 RIGID PVC CONDUIT - TRENCHED
8085	750	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO 14 AWG)
8086	1000	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO 14 AWG)
8087	2200	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO 14 AWG)
8062	75	LF	FURNISH AND INSTALL NO 6 AWG STRANDED BARE COPPER GROUND WIRE
8077	160.1	SF	INSTALL OVERHEAD SIGN
8022	2	EA	FURNISH AND INSTALL MAST ARM POLE AND 50 FOOT MAST ARM
8023	1	EA	FURNISH AND INSTALL MAST ARM POLE AND 60 FOOT MAST ARM
8047	5	EA	REMOVE AND DISPOSE OF EXISTING FOUNDATION 12 INCHES BELOW GRADE
8048	1	LS	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8088	500	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO 12 AWG) TYPE "TC"
8076	50	SF	INSTALL GROUND MOUNTED SIGN
8000	150	LF	REMOVE AND RESET BRICK PAVERS IN SIDEWALK
8060	65	LF	FURNISH & INSTALL WOOD SIGN SUPPORTS 4 INCH x 4 INCH
8049	5	EA	VIDEO DETECTION CAMERA
8050	1	EA	VIDEO INTERFACE EQUIPMENT
8025	1	EA	FURNISH AND INSTALL MAST ARM POLE AND 70 FOOT MAST ARM
8032	4	EA	INSTALL PUSHBUTTON AND SIGN
8095	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT
8078	2500	LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE JELLYFILLED UNDERGROUND
8073	75	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR WIRE NO 8 AWG THHN/THWN (LIGHTING)
8072	75	LF	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR WIRE NO 4 AWG THHN/THWN (TRAFFIC SIGNAL)
8014	2	EA	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCCELL
8000	2	EA	FURNISH AND INSTALL 20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
8045	4	EA	PAINT STRUCTURE (BRONZE)
8000	70	LF	PULL BACK EXISTING CABLE/WIRE
8000	1	EA	DELIVERY OF REMOVED CONTROLLER, CABINET AND GALVANIZED SIGNAL STRUCTURE

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. BOB GONZALES.
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EQUIPMENT LIST CONT.

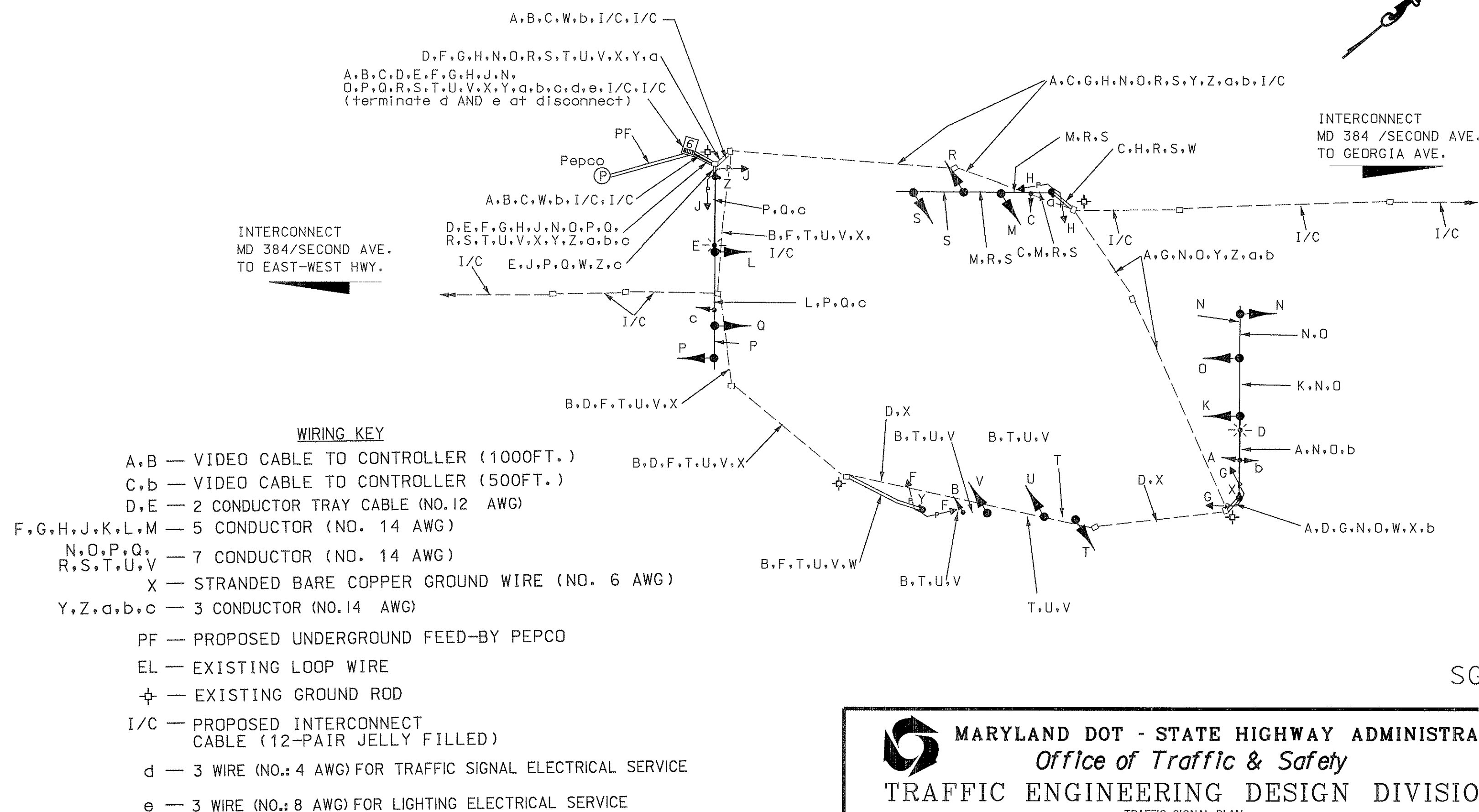
C. EXISTING EQUIPMENT REMOVED BY THE CONTRACTOR, AND DELIVERED TO 1283 - SEVEN LOCKES ROAD BUILDING "C", ROCKVILLE ,MARYLAND 20854

1 EA CONTROLLER AND CABINET - BASE MOUNT

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13-16	17-20	
Phase 1 & 6	G	G	G	R	R	R	R	R	-G	R	R	R	DW	DW	←→
1 & 6 change	G	G	Y	R	R	R	R	R	-Y	R	R	R	DW	DW	←→
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW	←→
2 & 6 change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	←→
Phase 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	WK	WK	○←○
PED Clearance	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	○←○
2 & 6 change	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	○←○
Phase 3	R	R	R	R	R	R	G	G	G	R	R	R	WK	WK	○↓○
3 change	R	R	R	R	R	R	Y	Y	Y	R	R	R	FL/DW	FL/DW	○↓○
Phase 3	R	R	R	R	R	R	G	G	G	R	R	R	DW	DW	○↓○
PED Clearance	R	R	R	R	R	R	G	G	G	R	R	R	DW	DW	○↓○
3 change	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	○↓○
Phase 4	R	R	R	R	R	R	R	R	R	R	R	R	WK	WK	○↑○
4 change	R	R	R	R	R	R	R	R	R	G	G	G	FL/DW	FL/DW	○↑○
Phase 4	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	○↑○
PED Clearance	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	○↑○
4 change	R	R	R	R	R	R	R	R	R	G	G	G	DW	DW	○↑○
Flashing Operation	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	↕

WIRING DIAGRAM



SG-2



MD 384 (COLESVILLE ROAD)
AND SECOND AVE/WAYNE AVE.

DRAWN BY: M.A.M.

CHECKED BY:

SCALE:

DATE: SEPT. 2001

F.A.P. NO.

S.H.A. NO.

COUNTY:

LOG MILE:

TS NO.

2092B

T.I.M.S. NO.

E763

SHEET NO.

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